FROM FIELD AND STUDY

An observation of Acritoscincus trilineatum in a Wedge-tailed Shearwater colony on Rottnest Island - As its common name suggests, the South-western Cool Skink Acritoscincus trilineatum Bassiana (formerly trilineata) occurs in temperate, southwestern Australia, where it is generally associated with lakes, swamps, water courses and other damplands (Bush et al. 1995; Storr et al. 1999). A. trilineatum has previously been recorded on Rottnest Island, off the coast of Perth, Western Australia, where it was described as 'scarce' (Storr 1984) and 'uncommon' (Brooker et al. 1995). The Western Australian Museum has six specimens from Rottnest Island: one collected in each of 1954, 1960 and 1961, with no specific location details, and three collected in 1986 from the Bickley Swamp area (data courtesy of R. How). The most westerly recording of this species on Rottnest Island is Narrowneck (J. Dell, pers. comm.). Storr (1984) noted that A. trilineatum was confined to damp areas in the vicinity of freshwater seepages, but recent biological surveys on the island suggest that the species is not so strictly associated with swamps or seeps (l. Dell, pers. comm.).

On 14 May 2003 I hand-captured a single, live specimen while working in the Wedge-tailed Shearwater *Puffinus pacificus* colony at Radar Reef, on the south-western tip of Rottnest Island. The snout-vent length of the animal was 43 mm, the total length 119 mm and it weighed 1.7 g. The site of capture was less than 2 m above sea level, and within 10 m of the edge of the reef platform (0354244 E, 6455582 N). The surrounding vegetation was dominated by Iceplant Mesembryanthemum crystallinum and Coastal Saltbush Atriplex cinerea growing in coarse sand over the shearwater burrows. This capture represents a westerly extension of the range of A. trilineatum on Rottnest Island.

Characteristics of the site are comparable with the known ecological requirements of A. trilineatum. M. crystallinum is a succulent annual, that traps a humid air layer between its foliage and the ground surface (Rippey and Rowland 1995; W. Bancroft pers. obs.). Although this plant dies off by mid-summer each year, the combination of M. crystallinum and the shearwater burrows obviously provide suitably humid refugia to support A. trilineatum.

REFERENCES

BROOKER, M.G., SMITH, G.T., SAUNDERS, D.A., INGRAM, J.A., LEONE, J. and DE REBEIRA, C.P.S. 1995. A biological survey of Garden Island, Western Australia: 1. Birds and reptiles. Western Australian Naturalist 20: 169–184.

BUSH, B., MARYAN, B., BROWNE-COOPER, R. and ROBINSON, D. 1995. A Guide to the Reptiles and Frogs of the Perth Region. University of Western Australia Press, Nedlands, Western Australia.

RIPPEY, E. and ROWLAND, B. 1995. Plants of the Perth Coast and Islands. University of Western Australia Press, Nedlands, Western Australia.

STORR, G.M. 1984. Annotated list of Rottnest frogs and reptiles. In: Rottnest Island Authority (Ed), Rottnest Island Management Plan. Volume III, pp. 24–25. RIA, Rottnest Island, Western Australia.

STORR, G.M., SMITH, L.A. and JOHNSTONE, R.E. 1999. Lizards of Western Australia. I. Skinks. Western Australian Museum, Perth, Western Australia.

–WESLEY J. BANCROFT, School of Animal Biology, M092, University of Western Australia, 35 Stirling Highway Crawley WA 6009

Observations of Aprasia repens on Rottnest Island – Worm lizards in the genus Aprasia are predominantly fossorial and their ecology is not well understood (Storr et al. 1990; Webb and Shine 1994; Cogger 2000). Existing information has largely been deduced from dissection of museum specimens (Webb and Shine 1994). Opportunistic observations of the behaviour of live specimens are therefore particularly valuable in supplementing the museum data.

On 14 April 2003 1 unearthed two separate pairs of the Southwestern Sandplain Worm Lizard *Aprasia repens*, while collecting soil samples at Radar Reef, Rottnest Island (0354463 E, 6455883 N). Remarkably the two unearthings came from only five localised instances of soil sampling. Both pairs were located within 30 mm of the soil surface in a dense mat of roots and were associated with the underground burrow systems and nests of the ant Camponotus sp. The surface vegetation was dominated by axillaris. Westringia Olearia dampiera, and Acanthocarpus preissii. These observations support previous findings that A. repens frequent root mats (Cogger 2000), that they forage and predominantly on ant larvae and pupae (greater than 95% of gut contents: Webb and Shine 1994).

Each of the Rottnest Island pairs comprised one larger (approximately 110 mm) and one smaller (approximately 90 mm) individual in close proximity (10-30 mm). A study by Patchell and Shine (1986) measured A. repens specimens from the Sydney Museum and found mean snoutvent lengths (SVL) of were 83.7 mm for males and 108.0 mm for females. Similarly, for Western Australian and South Australian specimens, Webb and Shine (1994) reported mean SVL of 89.9 mm and 107.8 mm for male and female A. repens, respectively. It is likely that each of the Rottnest Island pairs comprised a male and female animal.

While the timing of copulation and fertilisation has not been recorded for A. repens, Webb and Shine (1994) noted that females were gravid during November and December, and males had enlarged testes from August to November. It is probable that A. repens oviposits immediately after a spring mating. If my observations represent reproductive pairs, then